

KAPAS, László

Organisational questions of purchasing agricultural products by the government (supplying the industry with raw materials) after the socialist transformation of agriculture. *Elelm ipar* 16 no.10:310-314 0 '62.

1. *Elelmezesugyi Minisaterium*, es "*Elelmezesi Ipar*" szerkeszto bizottsagi tagja.

KAPAS, Laszlo

Role of fodder mixture exchange in the fodder economy. Elelm
ipar 19 no.2:43-47 F '65.

1. Institute of Food Industry Economics and Organization,
Budapest, and Editorial Board Member, "Elelmezési Ipar."

KAPAS, Laszlo

Long-range scientific research plan for raw material supply.
Elelm ipar 17 no.8:257-262 Ag '63.

1. Elelmiszeripari Ipargazdasagi es Uzemszervezesi Intezet;
"Elelmezesi Ipar" szerkeszto bizottsagi tagja.

KAPAS, Lasso

Results in the long-range scientific research on raw material supply. Elelm ipar 18 no.10:307-311 0 '64.

1. Institute of Food Industry Economics and Organization,
Budapest.

KAPAS, Magdolna; MARFAI, Arpad

Some problems relating to the private constructions and private small-scale construction industry. Stat szemle 40 no.12:1224-1239 D '62.

1. Kozponti Statisztikai Hivatal foeladoja (for Kapas).
2. Kozponti Statisztikai Hivatal osztalyvesetochelyettese (for Marfai).

KAPAS, G., Gati, J.

Grooving pipe rolls with a constant inner diameter and external diameter variable per section. p. 170.

(KOTASZATI LAPOK. Vol. 12, no. 1/5, Apr/May 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EFAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.

GATI, Jeno, kohomernok; KAPAS, Otto, gepeszmernok

Grooving of ~~grooving~~ of rolls for pipes with constant internal
and with sectionally variable external diameter. Koh lap 12
no. 4/5:170-175 Ap-My '57.

COUNTRY : HUNGARY
 CATEGORY : Cultivated Plants. Forage Plants.
 ABS. JOUR. : RZhBiol., No. 23 1958, No. 104737
 AUTHOR : Kapas, S., Keleman, I.
 INST. : ~~Research Institute~~
 TITLE : Variety Trials of Corn for Silage.
 ORIG. PUB. : Magyar mezogazd., 1958, 13, No. 6, 6-7
 ABSTRACT : No abstract.

Card: 1/1

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KAPATSH, G.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000520420013

for lighting. as descr. avish. 6 no. 104737 (MIRA 16:11)

1. Zamestitel' nachal'nika Otdela regulirovaniya ulichnogo
 dvizheniya i Gosudarstvennyy avtomobil'noy inspeksii po
 g. Moskve Ispolnitel'nogo komiteta Moskovskogo gorodskogo
 soveta deputatov trudyashchikhaya.

KAPAT'SINA, V., doktor, laureat Gosudarstvennoy premii; DZHURZHU, T.
[Chochorashvili, T.], doktor.

Use of aerosols in veterinary medicine. Veterinariia 36 no.5:
41-45 May '59. (RISA 12:7)

1. Veterinarnyy voyennyi gosital', Bukharest.
(Aerosols) (Veterinary medicine)

KAPATSINSKAYA, A. A.

25854. KAPATSINSKAYA, A. A. Metody vyvedeniya novay porody
ovets v Gor'kovskoy oblasti. Sov. zootekhnika, 1949, No. 4, S. 63-69.

So. Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

KAFATSIKSKAYA, A. A.

"Gorkiy Meat and Wool Producing sheep and Methods of Exploiting Them." Dr Agr
Sci, All-Union Sci-Res Inst of Animal Husbandry, Gor'kiy, 1954. (RZhEIOL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (13)
SO: Sum, No. 598, 29 Jul 55

KAPATSINSKAYA, A. A.

14-57-6-12982

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,
p 166 (USSR)

AUTHOR: Kapatsinskaya, A. A.

TITLE: Mutton and Fleece Production in the Collective Farms
of the Gor'kovskaya Oblast' (Myasosherstnoye ovtse-
vodstvo v kolkhozakh Gor'kovskoy oblasti)

PERIODICAL: Ovtsevodstvo, 1956, Nr 8, pp 15-20

ABSTRACT: The collective farms of the Gor'khovskaya oblast' have
been experimenting in breeding their Gor'kovskiy
mutton and fleece strain which was developed by
crossing the local thick-fleeced variety with Hampshire
sheep.

Card 1/1

KAPATSINSKAYA, Antonina Aleksandrovna, prof.; TARASOVA, K.A., red.; NEM-
CHENKO, L.I., tekhn. red.

[Sheep farming in Gorkiy Province] Ovtsevodstvo Gor'kovskoi ob-
lasti. Gor'kii, Gor'kovskoe knizhnoe izd-vo, 1960. 174 p.
(MIRA 14:7)

(Gorkiy Province—Sheep)

KAPATSINSEAYA, L.A.; SYROMYATNIKOV, N.G.

Use of ion exchanging resins in the radiochemical analysis of natural objects. Report no.1: Concentration and separation of natural radioactive elements using the KU-2 cationite. Vest. AN Kazakh. SER 14 no.4:60-66 Ap '58. (MIRA 11:6)
(Radioactive substances) (Ion exchange)

SYROMYATNIKOV, N.G.; EYRISH, M.V.; MUKASHEV, F.A.; KAPATSINSKAYA, L.A.;
DEMENT'YEV, V.S.

Determination of the isotopic composition of thorium in natural
formations. Radiokhimiia 5 no.2:164-170 '63. (MIRA 16:10)

SYROMYATNIKOV, N.G.; KAPATSINSKAYA, L.A.

Thorium content of underground water. Vest.AN Kazakh.SSR 16
no.1:83-84 Ja '60. (MIRA 13:5)
(Water, Underground)
(Thorium)

SYROMYATNIKOV, N.G.; MUKASHEV, F.A.; KAPATSINSKAYA, L.A.

Determination of MsTh_1 by measuring β -radiations of MsTh_2
in a radium preparation from which foreign radioelements were
removed. Radiokhimiia 5 no.3:356-360 '63. (MIRA 16:10)

(Radium isotopes--Analysis)
(Actinium isotopes--Analysis)
(Beta rays)

| KAPATSKIN, S. V. | | | | | | | | | | PROCESSING AND PROPERTIES INDEX | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|
| CA | | | | | | | | | | <p>Treating the Neftegaz crude oil—S. V. Kapatskin and V. V. Afsherkhanov. <i>Neftevaer</i> A No. 1033. No. 12, M-5.—The usual distn. and treating procedure is described in detail. This crude oil yields up to 35% lubricating oil fractions. The bottoms yield all four grades of pitch.</p> <p>A. A. Buchting</p> | | | | | | | | | |
| ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION | | | | | | | | | | <p>STON: STON: 100</p> <p>STON: 100</p> <p>STON: 100</p> | | | | | | | | | |

KAPATSINSKIY S.V.

Refining crude oil from Soyatol Island. V. Mish-
cheryakov and S. Kapatsinskiy. *Nefteprom Akos* 1936.
No. 8, 47-50. — The Soyatol Island crude oil contg.
aromatic compds. 30.0, unsatd. hydrocarbons 5.0, meth-
ane-naphthene hydrocarbons 22.7 and naphthenic
acids 1.3-1.65% (acid no. 100) was neutralized with
NaOH (0.25-0.4%) in the presence of "acid oil" (0.2-1);
it yielded high-grade distillates, which were refined with
greater ease than distillates not neutralized. The alkali
sludge was high in unsaponifiable matter and resins.
A. A. Podgorniy

REF. ID: A66400

REF ID: A66884

22

KAPATSINSKIY S.V.

ca

The cause of corrosion during the refining of the Nefte-
dag crude oil. S. V. Kapatsinskiy. *Neftepromyshlennyye Aparaty*
1937, No. 2, 60-61. The corrosion is due to the action of
SO₂, salts, H₂S and possibly HCl. The corrosion occurs
only where ~~water~~ are dissolved; i.e., in the kerosene tower
and the condenser. Dehydration of the crude oil does
not permit lowering its ash content, since the oil will
water form stable emulsions with the crude oil. This
crude oil should not be washed with water, but should be
neutralized with NaOH instead, with caustic alkalis.

A. A. Boshinok

AND THE PROPERTIES OF THE

DEVELOPMENT OF LITERATURE REVISION

| | | | |
|--|--|-----------------------------|--|
| KAPATSINSKIY | | Sov. V. and properties with | |
| CA | <p>Catalysts used in the accelerated oxidation of asphalt. <i>Zh. Khim. Khim. Khim.</i> No. 5, 6, 20 (1964). The oxidation of petroleum fractions is accelerated in the presence of catalysts such as $\text{Ca}(\text{OH})_2$ and Ca naphthenate under lab. conditions. However, under refinery conditions catalysts are undesirable, because they increase the process temp.; this results in an inferior asphalt and causes difficulties in controlling the process because of the exothermal reaction. A. A. Buchtingk.</p> | | |
| <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> | | | |
| <p>SEARCHED SERIALIZED INDEXED FILED</p> | | | |

| KAPATSINSKIY S. V. | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|-------------|--|--|--|--|--|--|--|--|--|--|--|--|
| CA | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Mineral-oil emulsion for greasing bread pans. S. V. Kapatsinskiy, U.S.S.R. 67,507, Oct. 31, 1946. Spindle of machine oil distillate is treated with concd. H_2SO_4 during stirring with air, and allowed to settle; the acid oil is decanted into a mixer, and neutralized with $Ca(OH)_2$. The resulting stable emulsion is used for greasing bread pans. M. Horsch</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASB-31A METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| FROM SYNONYM | | | | | | | | | | | | | FROM BOMANN | | | | | | | | | | | | |
| SYNONYM | | | | | | | | | | | | | BOMANN | | | | | | | | | | | | |
| SYNONYM | | | | | | | | | | | | | BOMANN | | | | | | | | | | | | |

KAPATSINSKIY, S.V.; LIPKIND, B.A.; KOZLOVA, T.Ye.; MALINA, A.S.

Crimean bentonites as raw materials for the production of
oil purification cracking catalysts and adsorbents. Bent.
gliny Ukr. no.3:89-98 '59. (MIRA 12:12)

1. Gor'kovskaya opytная baza Vsesoyuznogo nauchno-issledovatel'-
skogo instituta po pererabotke nefiti i gaza i polucheniyu
iskusstvennogo shidkogo topliva.
(Crimea--Bentonite) (Catalysts) (Adsorbents)

128

PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye
(Synthetic Zeolites: Production, Investigation, and Use). Mos-
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh
nauk. Komisiya po tseolitam.

Resp. Eds.: N. M. Dubinin, Academician and V. V. Serpinskiy, Doctor
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged
in the production of synthetic zeolites (molecular sieves), and
for chemists in general.

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Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Foreword

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Dubinin, M. M. Introduction

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Synthetic Zeolites: (Cont.)

807/6246

Belotserkovskiy, G. M., K. G. Ione, and T. G. Flachenov.
Production of Granular Synthetic Zeolites and Study
of Their Porous Structure

174

Flachenov, T. G., G. M. Belotserkovskiy, V. P., Karel'-
skaya, B. A. Lipkind, and L. I. Pigusova. Investiga-
tion of the Secondary Porous Structure of Synthetic
Zeolites and Their Drying Properties

182

Lipkind, B. A., V. A. Burylov, B. V. Kapatainskiy, and
A. T. Slepneva. Granulation of a Synthetic Zeolite
Desiccant

191

Kanavets, P. I., A. E. Sporius, P. N. Melent'yev, A. I.
Marun, O. A. Bokushava, V. I. Chernykh, and L. B.
Khandros. Production of Strong Spherical Granules of
Crystalline Zeolite Powders

195

Card 8/12 3/3

YEVDOKIMOV, V.G.; KALABIN, M.M.; KAPATSKIY, N.A., kand. fiz.-
matem.nauk, otv. red.; LEBEDEVA, I.A., red.

[Physics; textbook for students entering the Leningrad
Institute of Construction Engineers] Fizika; uchebnoe po-
sobie dlia postupaiushchikh v LISI; Leningrad, Inzhenerno-
stroite. in-t, 1963. 154 p. (MIRA 17:4)

KAPCHENKO, L.N.

Natural synthesis of crustal hydrocarbons. Trudy VNIGRI no.212.
Geokhim.sbor. no.8:41-56 '63.

"Petroleum drops" in mineral crystals.

Ibid.:57-65 '63.
(MIRA 16:12)

KAPCHENKO, L.N.

Hypothesis concerning the concentration of sedimentary-cover
abyssal caused by the removal of water molecules from solutions.
Lit. i pol. iskop. no.2:134-140 Mr-Apr '65. (MIRA 18:6)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy
institut, Leningrad.

KAPCHENKO, L.N.

Genesis of internal chloride brines in the Siberian Platform.
Geokhimiia no.11:1182-1192 N '4. (MIRA 18:8)

1. All-Union Scientific Research Institute for Geological Petroleum
Prospecting, Leningrad.

SECRET (U)
ACCT NO AT6033194

SOURCE CODE: UR/3158/66/000/036/0001/0010

AUTHOR: Kapchigashev, S. P.; Popov, Yu. P.

ORG: none

TITLE: Determination of level densities and the "a" parameter from data on averaged [neutron] capture cross-sections

SOURCE: Obninsk. Fiziko-energeticheskiy institut. Doklady, FEI-36, 1966.
Opredeleniye plotnostey urovney i parametra "a" dannykh po usrednennym
secheniyam zakhvata, 1-10

TOPIC TAGS: neutron capture, Fermi level, level density, neutron, radiation capture, radiation neutron capture, radiation width, resonance, nucleon state, plasma density

ABSTRACT: Cross-sections of radiation capture of neutrons with energies less than 50 kev, averaged for several resonances, are analyzed to obtain the parameter Γ/λ . On the basis of radiation widths obtained for the parameter Γ/λ , measured for different resonances, level densities are computed for nuclei with $51 \leq A \leq 205$, and values are obtained for the parameter a, which represents the

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L 09875-67

ACC NR: AT6033194

density of single nucleon states near the Fermi level. The results agree with data obtained on low-lying resonances. The general pattern of the relationship $a(A)$ was found to be in accord with the theoretical curve obtained by Abdel'malik and Stavinskiy. The authors thank F. I. Shapiro for his interest in their work and valuable comments. Orig. art. has: 8 formulas, 1 table, and 1 figure. [Authors' abstract]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 014/

Card 2/2

1. 12207451 MFV(h)-2/EWP(g)/EWT(m)/BDS AFFTC/ASD/SSD Pu-4 WW/JD/

JG

ACCESSION NR: AP3005219

8/0089/63/015/002/0120/0126

AUTHOR: Kapchigashv, S. P.; Popov, Yu. P. 78
66

TITLE: Capture cross sections of neutrons with energies up to 50 kev by certain construction materials 19

SOURCE: Atomnaya energiya, v. 15, no. 2, 1963, 120-126

TOPIC TAGS: capture cross section, neutron slowing down, nickel, copper, molybdenum, tungsten, neutron spectrometer, resonance, proportional counter, fast neutron, thermal neutron, neutron capture, reactor design, construction material, lead

ABSTRACT: The effective capture cross sections of neutrons with energies up to 50 kev were measured in nickel, copper, molybdenum, and tungsten by means of a neutron spectrometer based on the neutron slowing-down time in lead. The operating principle of the spectrometer and the measuring method have been described previously (Yu. P. Popov and F. L. Shapiro. Zh. eksperim. i teor. fiz., v. 42, 988 (1962); N. T. Kashukayev, Yu. P. Popov, and F. L. Shapiro. Sb. Neytronnaya fizika. M., Gosatomizdat, 1961, p. 354; Yu. P. Popov and F. L. Shapiro. Zh.

Card 1/03

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ACCESSION NR: AP3005219

3

eksperim. i teor. fiz., v. 40, 1610 (1961)). The dependence of an effective neutron capture cross section on energy for nickel and copper is shown in Fig. 1 of the Enclosure. Nickel specimens were made of various types of metallic nickel and nickel oxide. The results indicate that for nickel at energies from about 1.5 kev to 0.8 ev, the capture cross section dependence is in accordance with the $1/v$ law. The small peak at $E \approx 130$ ev is possibly due to the presence of cobalt in the nickel. The deviation of the capture cross section in copper from the $1/v$ law at $E > 150$ ev indicates the presence of resonance with negative-level energy in one of the copper isotopes. The energy dependence of the neutron capture cross section in molybdenum was studied for six specimens of various thickness and five different types of metal. The different thicknesses of specimens made it possible to determine the effect of self-shielding and to demonstrate that this effect is absent at $E > 1$ kev. The use of different types of molybdenum indicated that low peaks on the cross-section curve (Fig. 2 of Enclosure) are due to impurities. For example, the presence of about 0.35% tungsten contributed 1.2 barn to the resonant integral of neutron capture in molybdenum. The capture cross sections in tungsten were measured with five specimens of various thicknesses and three different types of metal. The results

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ACCESSION NR: AP3005219

for tungsten are shown in Fig. 3 of Enclosure. "The authors express their deep appreciation to F. L. Shapiro for continuous attention to the paper and his valuable advice and to Yu. Ya. Stavisskiy for his assistance. The authors also acknowledge V. A. Kovks and S. A. Romanov for their help with the measurements, and Yu. A. Dmitriyenko, S. N. Gubessov, A. M. Klabukov, and Ye. D. Bulatov for assuring the normal operation of the spectrometer. The authors are also grateful to V. S. Zolotarev and his associates for preparing specimens with separated isotopes." Orig. art. has: 4 figures, 1 table, and 1 formula.

ASSOCIATION: none

SUBMITTED: 23Oct62

DATE ACQ: 06Sep63

ENCL: 03

SUB CODE: NS, PR

NO REF SOV: 014

OTHER: 013

Card 3/03

ACCESSION NR: AP4020337

8/0089/64/016/003/0256/0258

AUTHOR: Kapchigashav, S. P.; Popov, Yu. P.

TITLE: Cross section of capture of neutrons with energy up to 50 kev. by Cr, Cr sup 50, Cr sup 52, Cr sup 53 nuclei

SOURCE: Atomnaya energiya, v. 16, no. 3, 1964, 256-258

TOPIC TAGS: neutron capture cross section, Cr nucleus, Cr sup 50 nucleus, Cr sup 52 nucleus, Cr sup 53 nucleus, chromium isotope, neutron, Cr

ABSTRACT: Curves for the energy dependence of neutron radiation capture cross sections with energies up to 50 kev. are shown by the natural mixture of chromium isotopes and Cr⁵⁰, Cr⁵², Cr⁵³ isotopes measured in a spectrometer with respect to moderation time of the neutrons in lead. Measurements with specimens of varied thickness of the natural mixture indicate that the effect of self-shielding is absent in the entire energy range. Small quantities of the substance did not permit measurements to be conducted with separated isotopes. However, in comparing the values of a cross section for chromium isotopes with cross sectional values for the natural mixture in a range more likely for the self-shielding

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ACCESSION NR: AP4020337

effect ($E = 5$ to 6 KeV.), the specimens are thin. Measurements were also conducted with the Cr^{54} isotope but due to a very low capture cross section, it is difficult to separate the effect from the background. Therefore, only the upper limit of the resonance integral was carried out. "In conclusion, we are deeply grateful to F. L. Shapiro for his constant attention in the work and to V. S. Zolotarev and his co-workers for having given us the separated chromium isotopes". Orig. art. has: 2 tables, 1 figure.

ASSOCIATION: None

SUBMITTED: 13Aug63

DATE ACQ: 31Mar64

ENCL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 007

Card

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L 1924-66 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) LJP(c) JD/WW/JG/DM

ACCESSION NR: AP5023775

UR/0089/65/019/003/0294/0296
539.172.4:539.17.02

AUTHOR: Kapchigashev, S. P.

TITLE: Radiative-capture cross sections of ⁵¹vanadium, ⁹¹zirconium, ⁹¹zirconium super 90, ⁹¹zirconium super 91, and ⁹⁴zirconium super 94 nuclei for 1-50,000 av neutrons

SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 294-296

TOPIC TAGS: neutron capture, neutron cross section, vanadium, zirconium, thermal neutron, resonance absorption, capture cross section

ABSTRACT: Radiative capture cross sections were measured for vanadium, zirconium, and the separated isotopes Zr⁹⁰, Zr⁹¹, and Zr⁹⁴ with a neutron spectrometer in the 1-50,000 ev range during moderation in lead. From the graphs of $\sigma(\eta, f) = f(E)$, the capture cross section integral is determined for any energy interval that is not too narrow. The absolute normalization of the cross section for vanadium is based on the capture cross sections of thermal neutrons (5.0 ± 0.01 barn), and for zirconium, Zr⁹⁰, Zr⁹¹, and Zr⁹⁴, on the resonance levels of molybdenum and tungsten. The gamma-ray detectors used were proportional and scintillation counters. The resonance absorption integrals obtained are tabulated, and the

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ACCESSION NR: AP5023775

results are compared with those of other authors. "The author is deeply grateful to F. L. Shapiro and Yu. P. Popov for a steady interest in the work and expresses his sincere appreciation to V. S. Zolotarev and co-workers for the separated zirconium isotopes which they kindly supplied." Orig. art. has: 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 31Dec64

ENCL: 00

SUB CODE: NP

NO REF SOV: 006

OTHER: 006

2/2

APOSTOLOV, B.G., dotsent; KAPCHINSKAYA, T.V.

Effectiveness of prednisolone in treating toxic forms of
pneumonia in very young children. Uch. zap. Stavr. gos.
med. inst. 12:371-372 '63. (MIRA 17:9)

1. Kafedra detskikh bolezney (zav. dotsent B.G. Apostolov)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

KAPCHINSKAYA, Ye.

"Geography of the Ukrainian S.S.R."; textbook for the eighth grade
of the eight-year school by A.T. Dibrova. Reviewed by E.
Kapchinskaja. Izv. Vses. geog. ob-va 94 no.4:357-358 J1-Ag '62.
(MIRA 15:9)
(Ukraine—Geography) (Dibrova, A.T.)

KAPCHINSKAYA, Ye.I.

Role of Upper Neogene sediments in the formation of the recent
relief as revealed by a study in Kotovsk District, Odessa Province.
Trudy Od. un. 152 Ser. geol. i geog. nauk no.8:152-158 '62.
(MIRA 17:9)

KAPCHINSKAYA, Yefrosin'ya Ivanovna. [Kapchins'ka,
I.E.I.], kand. geogr. nauk; LOMAYEV, O.O. [Lomaiev, O.O.],
kand. geol.-min. nauk, otv. red.; TUBOLEVA, M.V. [Tubolieva,
M.V.], red.; MATVIYCHUK, O.A., tekhn. red.

[Our flourishing republic; sketch on the natural features
and natural resources of the Soviet Ukraine] Nasha kvitucha
respublika; narys pro pryrodu i pryrodni bahatstva Riadians'-
koi Ukrainy. Kyiv, Tovarystvo "Znannia" Ukrain's'koi RSR,
1963. 44 p. (MIRA 16:12)

(Ukraine--Economic geography)

KAPATSINSKIY, Ye.V.

Hemodynamic characteristics in patients operated on under ether-oxygen anesthesia with diprasin premedication. Vest.khir. 86
no.2:71-74 '61. (MIRA 14:2)

1. Iz kliniki voyenno-morskoy khirurgii (nash. - prof. A.A. Bocharov) Voenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.

(PHENOTHIAZINE) (ETHYL ETHER) (BLOOD-CIRCULATION)

KAPCHENKO, L.N.

Nature of internal chloride brines. Sov.geol. 5 no.3:96-107
M. '62. (MIRA 15:4)

1. Lenskaya ekspeditsiya Vsesoyuznogo nauchno-issledovatel'skogo
geologorazvedochnogo neftyanogo instituta.
(Brines) (Chlorides)

KAPCHINSKIY, I.M.; KHAYKIN, S.M., redaktor; VORONIN, K.P., tekhnicheskii
redaktor.

[Methods of the oscillation theory in radio engineering] Metody
teorii kolebaniy v radiotekhnike. Moskva, Gos. energ. izd-vo, 1954.
352 p. (MLRA 7:11)
(Oscillations) (Radio)

24.6720
S/089/62/013/003/002/007
B102/B104

AUTHOR: Kapchinskiy, I. M.

TITLE: Achievement of maximum injection current in a strong focussing proton synchrotron

PERIODICAL: Atomnaya energiya, v. 13, no. 3, 1962, 235-240

TEXT: Though hitherto the greatest acceleration energies attainable in protons have been 25-30 Bev, proton synchrotrons of much higher energies are now being planned and built. In line with this trend, such accelerators are being designed for the maximum attainable injection current strength by adopting a strongly focussing linear accelerator as injector. Their calculation is based on an exact solution to the problem of the Coulomb interaction between the particles in the accelerated beam, taking the final phase volume and the space charge of the beam into account. The following equations serve to determine the trajectories of the particles in the XOZ and YOZ planes:

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Achievement of maximum injection, ...

S/089/62/013/003/002/007
B102/B104

$$\left. \begin{aligned} \frac{d^2 r_x}{d\tau^2} + Q_x(\tau) r_x - \frac{F_0^2}{r_x^3} - \frac{2r_a^3}{r_x + r_y} &= 0; \\ \frac{d^2 r_y}{d\tau^2} + Q_y(\tau) r_y - \frac{F_0^2}{r_y^3} - \frac{2r_a^3}{r_x + r_y} &= 0. \end{aligned} \right\} \quad (1)$$

(c.f. I. Kapchinskiy, V. Vladimirovskiy, Intern. Conf. on High-energy Accelerators and Instrumentation, Geneva, CERN, 1959, p. 274). Exact numerical solutions are obtained as well as approximations. When $1 > \cos \mu_0 > 0.3$, the approximate solution

$$\left. \begin{aligned} r_x(\tau) &= [1 + q_x(\tau)] R_x(\tau); \\ r_y(\tau) &= [1 + q_y(\tau)] R_y(\tau). \end{aligned} \right\} \quad (5)$$

agrees with the exact solution to within 10%. $\tau = z/S$, where S is the length of a focussing period; the functions $Q_x(\tau)$ and $Q_y(\tau)$ depend on the external focussing fields and on the h-f accelerating field; they have a period of $\Delta\tau = 1$. The modulation functions q_x and q_y are periodic solu-

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S/089/62/013/003/002/007

B102/B104

Achievement of maximum injection ...

tions of the equations

$$\frac{d^2 q_x}{d\tau^2} = -Q_x(\tau); \quad \frac{d^2 q_y}{d\tau^2} = -Q_y(\tau) \quad (6);$$

setting $R_x = R_y = R_K$ gives the expressions

$$R_K = \sqrt{\frac{F_0}{\mu_0}} \sqrt{\sqrt{1+h^2}+h}. \quad (9),$$

$$\frac{\mu}{\mu_0} = \sqrt{1+h^2}-h. \quad (12) \text{ where}$$

$$F_0 = \frac{S \sqrt{1-\beta^2}}{\pi \beta c} V_{ni} \quad (3);$$

h is the Coulomb parameter of the beam, μ the mean cyclic frequency of the transverse oscillations, and $\mu_0^2 = q_x(y)(\tau)q_x(\tau)d\tau$. The concept of "transmittance" is introduced, this being the greatest possible phase volume passing per second at $h = 0$ for a given channel with a negligibly

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Achievement of maximum injection ...

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B102/B104

small space charge, as found from the equation

$$V_n = \frac{\pi \omega_p a^2}{\sqrt{1-\beta^2}} \quad (13).$$

When $h \neq 0$, it is given by $V_{kh} = V_k / \sqrt{1+h^2} + h$. The following equations are obtained when $\mu_0 = 2\pi v$, $h_{\max} = 1/8Mv$, $R = MS/2\pi$ and $I_{\lim} = h_{\max} I_a$:

$$I_{\text{пред}} = \left(\frac{E^2}{E_0^2} - 1 \right) \frac{V_n}{8\pi c R} \frac{m_0 c^2}{e}, \quad (18)$$

$$I_{\text{макс}} = \left(\frac{E^2}{E_0^2} - 1 \right)^{1/2} \frac{A}{8R} \frac{m_0 c^2}{e}. \quad (19).$$

$\mu_{\text{пред}} = \lim.$, $\mu_{\text{макс}} = \max.$, A is the chamber acceptance, E the total injection energy, E_0 the rest energy and V_n the phase volume of the beam in the $x, p_x/m_0$ and $y, p_y/m_0$ planes. Numerical evaluation with $E - E_0 = 100$ Mev, $A = 2.5 \cdot 10^{-3}$ cm·rad, and $R = 235$ m, gives $I_{\max} = 40$ ma, i.e. $1.6 \cdot 10^{12}$ parti-

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S/089/62/013/003/002/007

B102/B104

Achievement of maximum injection ...

cles per accelerating cycle. I_{lim} depends only on V_{Π} and V_{kh} and is attained when $V_{\Pi} = V_{kh}$. This gives the expression

$$I_{max} = \frac{I_s}{2V_{\Pi}} V_{\Pi} = \frac{\mu_0 \omega_s S}{2\beta c} \left(\frac{\beta \lambda}{S} \right)^2 \left(\frac{a}{\lambda} \right)^2 \frac{\beta}{(1-\beta^2)^{3/2}} \frac{m_0 c^3}{e} \quad (21),$$

where λ is the wavelength of the accelerating field in the injector. The following expression is got for the maximum ratio of aperture to focussing field frequency

$$\frac{a}{S} = \frac{e B_{max} S \sqrt{1-\beta^2}}{15 m_0 c^2 \beta \sqrt{\sin^2 \frac{\mu_0}{2} + \frac{1}{2} \gamma_s}} \quad (24),$$

where B_{max} is the maximum induction. When λ increases, the aperture of the channel and I_{max} increase $\alpha \lambda^2$, since $S/\beta \lambda = \text{const}$. Numerical evaluation with $\cos \varphi_s = 0.8$ (φ_s - synchronous phase), $\cos \mu_0 = 0.6$, $S/\beta \lambda = 2$,

Card 5/6

Card 6/6

PLOTNIKOV, V.K.; Prinimal uchastiye; KAPCHINSKIY, I.M.

Selecting the shape of poles of quadrupole lenses. Prib. i tekhn.
eksp. 7 no.2:29-33 Mr-Ap '62. (MIRA 15:5)

1. Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR.
(Particle accelerators) (Electron optics)

L 02005-67 ENT(m)/ENP(1) IJP(c)

ACC NR: AN6023761

Monograph

Kapchinskiy, Il'ya Mikhaylovich

Dynamics of particles in linear resonance accelerators (Dinamika chastits v lineynykh rezonansnykh uskoritelyakh) Moscow, Atomizdat, 66. 0309 p. illus., biblio. 2,450 copies printed.

TOPIC TAGS: linear accelerator, electron accelerator, particle accelerator, ion beam focusing, particle beam, particle motion

PURPOSE AND COVERAGE: The book is devoted to a study of the motion of particles in linear resonance accelerators in which the particles are accelerated by high frequency traveling wave fields. The particle beam is separated by the field into bunches whose frequency equals the accelerating voltage frequency. From the point of view of particle dynamics, linear resonance accelerators can be divided into two types: in the first type (for heavy particles and low energy electrons) the phase velocity of the equivalent traveling wave is less than the speed of light; in the second type (for high energy electrons) it equals the speed of light. The motion of particles in the accelerating and focusing fields is coupled with the action of the inherent field of the beam and with the disordered spread of the particle thermal velocities determined by the phase volume of the beam. The theory of intense beams with consideration of both the finite phase volume and the finite current of the beam is developed by the author. The book is intended not only for specialists in accelerator technology but also for those interested in the problems of high intensity beam formation in other

Card 1/2

UDC: 531.3+539.12+621.384.62

L 02005-67

ACC NR: AM6023761

4
technical areas. The author thanks D. G. Koshkarev and V. K. Plotnikov for valuable discussions and B. I. Bondarev and K. I. Guseva for compiling the synopsis of lectures forming the basis of the book.

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Ch. 1. Longitudinal oscillations of particles in beams with negligibly small space charge density - - 7

Ch. 2. Transverse oscillations of particles in beams with negligibly small space charge density - - 54

Ch. 3. Transverse oscillations of particles in beams with large space charge density - - 176

Ch. 4. Longitudinal oscillations of particles in beams with large space charge density - - 263

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SUB CODE: 20/ SUBM DATE: 06Dec65/ ORIG REF: 060/ OTH REF: 072

ns
Card 2/2

KAPCHINSKIY, I.M.

Defocusing of a beam of charged particles. Radiotekh. i elektron.
8 no.6:985-990 Je '63. (MIRA 16:7)
(Electron beams)

L 13372-63

BDS/ENT(1)/ENT(m)/ES(w)-2

AFPTC/ASD/SSD Pab-L

ACCESSION NR: AP3002712

3/0120/63/000/003/0015/0019

AUTHOR: Kapchinskiy, I. M., Plotnikov, V. K.

61
60

TITLE: Magnetic quadrupole lenses for drift-tube type linear accelerators. 19.
1. Lens requirements and selection of pole-piece shape

SOURCE: Pribery* 1 tekhnika eksperimenta, no. 3, 1963, 15-19

TOPIC TAGS: magnetic quadrupole lens, linear accelerator

ABSTRACT: The problem of tolerable nonlinearity of the magnetic field in the quadrupole lenses is studied theoretically. Limitations are considered which are imposed on the shape of pole pieces by the small value of ratio of the drift-tube outside diameter to the aperture diameter. The authors find that: (1) with the number of focusing periods τ , the tolerable field deviation from linear, at the edge of the beam-occupied region, is $\Delta H/H \approx 45/\tau\%$; (2) the smallest size of the drift tubes is associated with the flat-pole lenses; the pole size should be so proportioned that the coefficient at the 5-th harmonic of the magnetic field expansion is zero. The flat-pole lenses are simple to manufacture

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L 13372-63

ACCESSION NR: AP3002712

and yield greater (as compared with the hyperbolic-pole lenses) maximum gradients because the working flux is smaller and the saturation occurs at stronger fields. Orig. art. has: 4 figures and 22 formulas.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki
(Institute of the Theoretical and Experimental Physics)

SUBMITTED: 16Jul62

DATE ACQ: 12Jul62

ENCL: 00

SUB CODE: NS, SD

NO REF SOV: 002

OTHER: 001

Card 2/2

L 58915-65 EWT(m)/EPA(w)-2/EWA(m)-2 Pt-7 IJP(c) GS

ACCESSION NR: AT5C07935

S/0000/64/000/000/0468/0470 17

AUTHOR: Kul'man, V. G.; Chistov, V. B.; Kapchinskiy, I. M.

TITLE: Designing very long resonators for a linear proton accelerator with drift tubes 19

SOURCE: International Conference on High Energy Accelerators, Dubna, 1963. Trudy. Moscow, Atomizdat, 1964, 468-470

TOPIC TAGS: high energy proton accelerator, linear accelerator

ABSTRACT: The resonators of a 100-Mev linear accelerator-injector were designed on the basis of experimental and computed data. (I. M. Kapchinskiy, et al., present conference, p. 462.) The present report discusses this data. The geometric dimensions for adjusting the sections to the same resonance frequency with an accuracy of the order of $\pm 0.1\%$ were found from empirical formulas based on a model of a half-section with movable bottom and changeable drift half-tubes. The lengths of the drift tubes were calculated on the basis of the potential distribution in the gaps. Calculations based on the theoretical work of V. G. Andreyev (NT-3161-40, Radiotekhnicheskiy institut AN SSSR, M. 1961) showed that the influence of the difference

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L 58915-65

ACCESSION NR: AT5007935

between the electrostatic and electromagnetic field distributions on the coefficient of flight time is very small up to the last accelerating gaps. This conclusion is verified also by a comparison of the fields measured in an electrolytic tank and in a high-frequency model of a section. The above-mentioned empirical formulas did not take into consideration the influence of the drift tubes' rods (diameter 60-70 mm) and the bellows (diameter 100 mm, height about 100 mm), which are installed at the base of the rods for mechanical uncoupling with the resonator and with projections inside the resonator. Therefore, after experimental determination of the influence of these design elements on the resonance frequency, the diameters of the resonators were corrected and finally found to equal, respectively, 132.4, 122, and 108.7 cm. The variation of the resonance frequency of the sections along the resonator was determined with rods and bellows present. An especially strong variation of the frequency is caused by the bellows in the first part of resonator I for a length of 0-3 m. In order to avoid a large field distortion, their influence was additionally compensated for by selecting suitable volumes for the connection pipes of the adjustment hatches, which are situated in this part of the resonators. After preparation of the resonators it was necessary to select the number of plates for field equalization with accuracy of the order of 1%. A small number of plates cannot ensure the required accuracy of the field distribution, but a too large number of plates leads to design complications. With this in mind, a theoretical study

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ACCESSION NR: AT5007935

was conducted which was based on the employment of the relation between the number of plates and the number of spatial field harmonics compensating for them. This study permitted a thorough evaluation of the accuracy of the field equalization $\Delta E/E$ as a function of the number of plates. This dependence has the form

$$\left| \frac{\Delta E}{E} \right| < \frac{32}{\pi} \left(\frac{L}{\lambda} \right)^2 P_{\max} \cdot A(m, \kappa),$$

where L/λ -ratio of the resonator length to wavelength, P_{\max} -greatest expected relative variation in the "local" frequency which is caused by errors in manufacture and in disregarded deviations from the form of the resonators. A-coefficient depending upon the number of drift tubes M and the number of adjustment plates m . A numerical evaluation showed that for a field equalization with accuracy of $\pm 3\%$ in resonators I, II, and III the number of plates should be of the order of 70, 45, and 30 respectively. The above derived formula gives an enhanced number of plates. Experiments on the field equalization of resonator models showed that a smaller number of plates could be selected. On the basis of this and considerations of design convenience regarding the plate positions, the total number of plates was reduced to 50, 44, and 34 respectively in resonators I, II, and III. All plates have

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ACCESSION NR: AT5007935

the same dimensions (0.5x0.5 m), and their movement ensures a variation in resonance frequency of the order of 1%. For the sake of automatic build-up of the resonance frequency uniformly along the resonators, plates 200x400 mm in size were installed in the number 12, 12, and 10 in the resonators I, II, and III, respectively. They move simultaneously and automatically, and can vary the resonance frequency in the limits $\pm 2 \cdot 10^{-5}$. Their number was selected from the consideration that the greatest spatial field harmonic arising during operation should exert practically no influence on the field. For regulation of the field gradient in the limits of 10^{-4} %, at the end of each resonator a plate 0.45x0.45 m in size and with a gap of 15 mm was installed. The plates are controlled remotely. In order to verify the correctness of the selection of the main data for the resonators, models of resonators I and III on the approximate scale of 1:4 were built and investigated. The field was rather easily adjusted with an accuracy of 3-4% with the help of the plates. The field measured close to the cylindrical wall of the resonator diminishes along the length. There is a considerable scatter of the experimentally obtained points, which is clarified by the errors in measurement and in the nonuniformity of the magnetic field. Experiments clarified how the field distribution varied during the operation of the plates for the regulation of the field gradient. Field distortions did not exceed 1% and had the character of a "gradient." The electric field

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L 50X15-05

ACCESSION NR: AT5007935

Distribution in the models was measured by the method of perturbation with the aid of small metal spheres 4-5 mm in diameter. Fig. 1 and 2 are figures.

ASSOCIATION: Radiotekhnicheskiy institut AN SSSR (Radio Engineering Institute, AN SSSR)

SUBMITTED: 26May64

ENCL: 00

SUB CODE: NP

NO REF SOV: 002

OTHER: 000

dm
Card 5/5

ACCESSION NR: AP4041008

S/0120/64/000/003/0026/0031

AUTHOR: Kapchinskiy, I. M.; Kronrod, A. S.

TITLE: Effect of the space charge on the phase oscillations of particles in an ionic linear accelerator

SOURCE: Priroda i tekhnika eksperimenta, no. 3, 1964, 26-31

TOPIC TAGS: ionic accelerator, linear accelerator, strong focusing accelerator, space charge effect

ABSTRACT: An integral equation is developed for the potential of a self-consistent Coulomb field of a beam:

$$\phi(\psi) = F(\psi) + k \int_0^{\psi} R(\psi, \alpha) \sqrt{1 - \phi(\alpha)} d\alpha,$$

where ϕ is the particle phase, k is a dimensionless auxiliary parameter for numerical solution, $k = eH_0/pvQ_0^2$. This equation, valid for any relation between the longitudinal and cross dimensions of clusters, is numerically solved with these boundary conditions:

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ACCESSION NR: AP4041008

$$\frac{d\Phi}{d\psi}(\psi_0) = 0; \quad \frac{d^2\Phi}{d\psi^2}(\psi_0) < 0. \quad \Phi(\psi_0) = 1; \quad \Phi(\psi_n) = 1.$$

The effect of the maximum cluster current upon the phase-stability region, phase-oscillation frequency, mean cluster current, and other parameters is evaluated. A phase-density distribution is considered when the clusters do not precess. The beam current limitation due to longitudinal disgregation is compared with that due to cross disgregation in a strong-focusing accelerator. It is found that the effect of the space charge upon the phase-stability region is weaker than in the case when the cluster is approximated by a uniformly charged ellipsoid. Orig. art. has: 7 figures and 25 formulas.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki GKAE
(Institute of Theoretical and Experimental Physics, GKAE)

SUBMITTED: 03Jul63

ATD PRESS: 3079

ENCL: 00

SUB CODE: NP

NO REF SOV: 003

OTHER: 001

Card 2/2

L 4228-66 ENT(m)/EPA(w)-2/EWA(m)-2 IJP(c) GS

ACCESSION NR: AT5007962

S/0000/64/000/000/0906/0911

AUTHOR: Kapchinskiy, I. M.; Kronrod, A. S.

TITLE: Influence of space charge upon phase oscillations of particles in the linear ion accelerator 19

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963.
Trudy. Moscow, Atomizdat, 1964, 906-911

TOPIC TAGS: high energy accelerator, ion acceleration, focusing accelerator

ABSTRACT: The application of rigid focusing in linear accelerators with wavelength of the high-frequency field $\lambda = 1.5-2$ meters has created real possibilities for forming proton beams with intensities up to 100 milliamperes per pulse with comparatively small expenditures of power upon focusing. The planning of such accelerators must take into consideration the longitudinal forces of electrostatic repulsion, which lead to deterioration of the conditions of autophasing. The influence of the bunches' own space charge upon the phase oscillations of the particles in linear accelerators has already been studied under the assumption that each bunch represents a uniformly charged ellipsoid (Akhiyezer, A. I.; Lyubarskiy, G.

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ACCESSION NR: AT5007962

Ya., et al., *Teoriya i raschet lineynykh uskoriteley* [Theory and Design of Linear Accelerators]. Moscow, Gosatomizdat 1962, p. 114; Vlasov, A. D., Nauchn. trudy RAI AN SSSR [Scientific Works of Radiophysics Apparatus Institute, Academy of Sciences SSSR], 2, n. 4, 27 (1960)). It remained unclear how well such an assumption approximates the self-consistent distribution of the charge in the bunch and whether the relations obtained under this assumption corresponds to the actual behavior of the bunches. The solution for the self-consistent longitudinal field of a beam accelerated in a ring machine under the assumption that the length of each bunch exceeds considerably its transverse size was obtained earlier (Nilsen, Sessler. Rev. Sci. Instrum. 30, 80 (1959)). In the initial part, however, of the accelerator (where the influence of the spatial charge is especially considerable) the longitudinal and transverse dimensions of the bunches are commensurable and the simplifying assumption made in the work (Nilsen, cit.) is poorly fulfilled. In the present work the authors have obtained an integral equation for the potential of the self-consistent Coulomb field of the beam, such that the equation is correct for any ratios of the longitudinal and transverse dimensions of the bunches. The work shows that the influence of the spatial charge upon the magnitude of the region of phase stability is considerably weaker than in the case where the bunch is approximated by a uniformly charged ellipsoid. The authors derive the fundament-

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1. 1964-66

ACCESSION NR: AT5007962

al equations, which are strongly nonlinear, obtain the numerical solution of the integral equation, and discuss the results of the numerical solution in graphical form. Orig. art. has: 7 figures, 23 formulas.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki GKAE SSSR (Institute of Theoretical and Experimental Physics, GKAE SSSR)

SUBMITTED: 26May64

ENCL: 00

SUB CODE: NP

NO REF SOV: 003

OTHER: 001

Card 3/3 *Sp*

KAPCHINSKIY, I.M.; KRONROD, A.S.

Effect of a space charge on the phase oscillations of particles
in a linear ion accelerator. Prib. i tekhn. eksp. 9 no.3:26-31
My-Je '64 (MIRA 18:1)

1. Institut teoreticheskoy i eksperimental'noy fiziki Gosudar-
stvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

Card 1/4

... lowering of the shunt impedance of the tube ...
... a beam is connected with ...
... and is an invariant quantity ...
... and the acceptance of the channel ... The specific acceleration ...
... wave length ...
...
...
...

1. 16155-05

ACCESSION NR: AT5007934

12, 235 (1962)). For the chosen values of the specific acceleration and

the time of the explosion, the maximum value of the acceleration is

by the transverse lateral repulsion (I. N. Kapchinsky, A. S. Kronrod, present conference, p. 906). It is assumed that the acceleration will be mainly due to the field drop during the 12 μ sec

of the injector was carried out under the scientific guidance of V. Y. Vladimirovskiy and A. L. Mints. The design was developed by the joint participation of the following associates of the Institute of Theoretical and Experimental Physics,

Card 3/4

AT 5007934

Thelaznikov, M. M. (1941) N. V. Kovalev, S. M.
I. V. Porykov, and others.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000520420013-4

ASSOCIATION: Radiotekhnicheskii Institut AN SSSR (Radio Engineering Institute,

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000520420013-4"

May accepted

7-133, 134, 135, 136

TOPIC TAGS: linear accelerator, high energy accelerator

[illegible]

... frequency accelerator channels. It is possible to apply only electrical automatic regulation systems, although they pose danger

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000520420013

CIA-RDP86-00513R000520420013

KAPCHINSKIY, LEV MIKHAYLOVICH

ZAGIK, Semen Yefimovich; KAPCHINSKIY, Lev, Mikhailevich; BERG, A.I.,
redaktor; DZHIGIT, I.S., redaktor; KULIKOVSKIY, A.A., redaktor;
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., redaktor;
CHUCHIK, P.O., redaktor; SHAMSHIN, V.I., redaktor; OVCHARENKO, Ye.
P., redaktor; VORONIN, K.P., tekhnicheskyy redaktor

[Television reception antennas] Priemnye televisionnye anteny.
Moskva, Gos. energ. izd-vo, 1956. 47 p. (MIRA 10:4)
(Television--Antennas)

KAPCHINSKIY, L.M.

USSR/ Electronics - Electromagnetic reception

Card 1/1 Pub. 89 - 18/30

Authors : Kapchinskiy, L.

Title : Television Antennas

Periodical : Radio 1, 37 - 39, Jan 56

Abstract : The characteristics of a receiving antenna are explained with emphasis on the advantages of having high directional selectivity to eliminate static and shadows. Single-program, external, receiving antennas with little directional selectivity, intended for receiving signals over distances of 20 - 25 km are dealt with at length, followed by an explanation of the single-program, external, receiving antennas with great directional selectivity, intended for receiving signals over distances of 25 - 30, 30 - 40, and 50 - 70 km. Data are also given for designing antennas for reception over distances of 70 - 80 km. Drawings, graphs, and tables on unnumbered pages between pages 32 and 33.

Institution :

Submitted :

112-57-8-17760

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 8,
p 271 (USSR)

AUTHOR: Kapchinskiy, L. M.

TITLE: A Two-Channel Meter-Wave Cutoff Attenuator (Dvukhkanal'nyy
predel'nyy attenuator metrovkh voln)

PERIODICAL: Tr. Televis. fil.-labor. M-vo radiotekhn. prom-sti SSSR
(Transactions of the television Branch Laboratory. Ministry of the
Radio-Engineering Industry, USSR), 1956, Nr 1, pp 45-47

ABSTRACT: A two-channel meter-wave attenuator is a round cutoff waveguide energized at the same or at different frequencies by two coupling loops fed by two independent sources. A pickup loop lying in the diametrical plane of the waveguide and movable along the waveguide axis serves as the receiving element. The running attenuation is 1 db/mm. Relative calibration of the attenuator in its linear section is practically independent of frequency within a broad frequency range. The working band of the attenuator is 50 to 70 mc. It permits inserting a

Card 1/2

KAPCHINSKIY, L.M.

USSR/Electronics - Television antennas

Card 1/1 Pub. 89 - 16/33

Authors : Kapchinskiy, L.

Title : Television antennas

Periodical : Radio 2, 34-39, Feb 56

Abstract : A comparison is made between the conditions under which an outside and an inside antenna work. These are found to be quite different. Under the reflecting effect of walls and metal parts of a building in a majority of cases the electromagnetic field inside a room is found to be a combination of horizontally and vertically polarized waves. These special factors are taken into consideration in designing inside antennas for which technical data and explanations are given. Types of antennas described are called: "telescope type," "abridged linear type," "ring type," and built-in type." Illustrations; diagrams.

Institution :

Submitted :

SOV/112-59-1-1793

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 1, p 254 (USSR)

AUTHOR: Kapchinskiy, L. M.

TITLE: A Case of Folded-Dipole Resonance

PERIODICAL: Tr. Televizion. fil.-labor., 1956, Nr 3, pp 63-68

ABSTRACT: Bibliographic entry.

Card 1/1

KAPCHINSKIY, L.M.

PHASE I BOOK EXPLOITATION

SOV/4401

Zagik, Semen Yefimovich, and Lev Mikhaylovich Kapchinskiy

Priyemnyye televisionnyye anteny (Television Receiving Antennas). 2nd ed., rev. and enl. Moscow, Gosenergoizdat, 1958. 79 p. (Series: Massovaya radiobiblioteka, vyp. 306) 100,000 copies printed.

Ed.: F.I. Tarasov; Tech. Ed.: L.Ya. Medvedev; Editorial Board: A.I. Berg, V.A. Burlyand, V.I. Vaneyev, Ye.N. Genishta, I.S. Dahigit, A.M. Kanayeva, E.T. Krenkel', A.A. Kulikovskiy, A.D. Smirnov, F.I. Tarasov, and V.I. Shamsbur.

PURPOSE: This booklet is intended for the amateur interested in television.

COVERAGE: The booklet describes in an easily understandable style various types of outdoor and indoor antennas intended for the reception of one or several television programs. No personalities are mentioned. There are no references.

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| Card 1/2 | |

ZAGIK, Semen Yefimovich; KAPCHINSKIY, Lev Mikhaylovich; IVANITSKIY, V.Yu.,
red.; MATVEYEV, G.I., tekhn.red.

[Coaxial cables] Koaksial'nye knbeli. Moskva, Gos.energ.isd-vo,
1959. 39 p. (Massovaya radiobiblioteka, no.324) (MIRA 12:4)
(Coaxial cables)

ZAGIK, Semen Yefimovich; KAPCHINSKIY, Lev Mikhaylovich; IVANITSKIY,
V.Yu., red.; VORONIN, K.P., tekhn. red.

[Television receiving antennas] Primenye televizionnye anten-
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TITLE: On a class of equations solved with respect to a function

PERIODICAL: Referativnyy zhurnal, Matematika, no. 9, 1962, 25, abstract 9B132
("Zesz. nauk. Politechn. częstochow.", 1960, no. 7, 3 - 6; Polish;
Summaries in Russian, English)

TEXT: The paper considers an equation of the form

$$y' = xy + \varphi(x) f(y') + g(y') . \quad (1) \quad \sqrt{B}$$

By differentiating both sides, it is brought into the form

$$- f(z) u' = g'(z) + f'(z) u + \varphi^{-}(u) , \quad (2)$$

where $z = y'$, $u = \varphi(x)$, φ^{-} is the function inverse to φ . The functions $\varphi(x)$ for which equation (2) takes the form of known equations are indicated and consequently equation (1) is solved by known methods.

From Author's summary

[Abstracter's note: Complete translation]

Card 1/1

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tion column with aid of a rotating shield. The shield of the dielec-
tric is partially covered with a metal sheet specially shaped to fit. The
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determ., micromethod)

(BLOOD,
ether, ethyl, determ., micromethod)

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colorimetry)

(COLORIMETRY,
of alkaloids)

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w Poznaniu, Dyrektor: prof. dr med. Ireneusz Roszkowski. 2. Z
Zakładu Farmakologii Akademii Medycznej w Poznaniu, Dyrektor:
prof. dr Dąbrowski.

(ETHER, ETHYL, anesthesia and analgesia,

*in caesarean section, eff. on fetus)

(CAESAREAN SECTION, anesthesia and analgesia,

*ether, ethyl, eff. on fetus)

(ANESTHESIA,

*ether, ethyl, in caesarean section, eff. on fetus)